

Notice of Allowability

Application No.

10/080,676

Examiner

Joseph R. Maniwang

Applicant(s)

ANDERSON ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/23/06.
2. ☒ The allowed claim(s) is/are 1,2,4-28 and 30-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

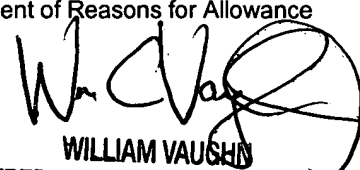
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 8/4/06
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Attorney Thomas C. Fiala (Reg. No. 43,610) on 08/04/06.

3. The application has been amended as follows:

Specification:

[0046] As used herein, the term "computer program product" may refer, in part, to removable storage unit 452, removable storage unit 454, a hard disk installed in hard disk drive 450, or a carrier wave carrying software over a communication path 466 (wireless link or cable) to communication interface 464. A computer useable medium can be a storage medium, including a magnetic media, optical media, or other recordable media, or a transmission media that transmits a carrier wave or other signal. These computer program products are means for providing software to computer system 202a.

Claim 27:

A computer program product comprising a computer useable storage medium

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having computer program logic for enabling a processor in a network gateway to perform caching of domain name system information, said network gateway further including a customer premises equipment interface, a network interface, and a cache for storing domain names and corresponding IP addresses, comprising:

means for enabling the processor to load the cache with a preliminary set of domain names and corresponding IP addresses, the preliminary set of domain names and corresponding IP addresses representing a selected set of addresses in an IP network to which the customer premises equipment interface is entitled to have access based on restrictions made by a network entity;

means for enabling the processor to receive a domain name system query from said customer premises equipment interface, said query including an unresolved domain name;

means for enabling the processor to determine if said unresolved domain name is stored in the cache;

means for enabling the processor to obtain an IP address corresponding to said unresolved domain name from the cache, generate a response to said query that includes said IP address corresponding to said unresolved domain name, and provide said response to the customer premises equipment interface, if said unresolved domain name is stored in the cache; and

means for enabling the processor to provide said query to the network interface if said unresolved domain name is not stored in the cache.

Allowable Subject Matter

4. Claims 1, 2, 4-28, and 30-33 are allowed.
5. The following is an examiner's statement of reasons for allowance:
6. The closest prior art is Moineau et al. (WO 00/27092), hereinafter referred to as Moineau, and Huitema (U.S. Pat. No. 6,016,512). Moineau disclosed a method for caching domain name system information in a network gateway (see Fig. 1, element 10) that included a customer premises equipment interface (see Fig. 1, element 12), a network interface (see Fig. 1, element 20), and a cache (see Fig. 1, elements 15, 16) for storing domain names and corresponding IP addresses, comprising receiving a domain name system query from a customer premises equipment over the customer premises equipment interface, said query including an unresolved domain name (see p. 4, lines 1-11). Moineau disclosed requests for numeric addresses in response to a domain name, such requests arriving from a CPE, i.e., "stations" (see p. 7, lines 14-16); determining if said unresolved domain name is stored in the cache (see p. 7, lines 14-27). Moineau disclosed lists of domain names and their corresponding IP addresses stored within the cache; where if said unresolved domain name is stored in the cache, obtaining an IP address corresponding to said unresolved domain name from the cache, generating a response to said query that includes said IP address corresponding to said unresolved domain name, and providing said response to the customer premises equipment interface for transmission to said customer premises equipment (see p. 9, lines 11-14); and if said unresolved domain name is not stored in said cache, providing said query to the network interface for transmission to a network for resolution of said

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query (see p. 5, lines 4-11; p. 8, lines 3-8). Huitema disclosed loading the cache with a preliminary set of domain names and corresponding IP addresses (see column 3, lines 44-67).

7. The prior art references of record do not teach alone or in combination all the limitations together within independent claims 1, 12, 16, 17, 24, 26, 27, and 32. For example, the independent claims contain the limitation wherein the preliminary set of domain names and corresponding IP addresses represent a selected set of addresses in an IP network to which the customer premises equipment is entitled to have access based on restrictions made by a network entity. Moineau discloses a cache of DNS entries, but does not explicitly disclose loading the cache with a preliminary set of domain names and corresponding IP addresses wherein the preliminary set of domain names and corresponding IP addresses represent a selected set of addresses in an IP network to which the customer premises equipment is entitled to have access based on restrictions made by a network entity as claimed. Huitema discloses loading a cache with a preliminary set of domain names, but does not provision its data sets based on the permissions given to a customer premises equipment. Therefore, the independent claims have allowable subject matter and are allowable over the prior art of record. The dependent claims of these claims are also allowable.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Maniwang whose telephone number is (571) 272-3928. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JM


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